

July 11, 2005

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 Twelfth Street, SW  
Washington, DC 20554

Re: *Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit  
Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands* – IB Docket No. 02-364

*Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for  
Mobile and Fixed Services to Support the Introduction of New Advanced Wireless  
Services, including Third Generation Wireless Systems* – ET Docket No. 00-258

Dear Ms. Dortch:

The Wireless Communications Association International, Inc. (“WCA”), by its counsel, submits this letter in response to the letter filed July 1, 2005 in the above-referenced proceedings by the International Microwave Power Institute (“IMPI”).<sup>1</sup> In that letter, IMPI belatedly opposes the proposals by WCA, Sprint Corporation (“Sprint”) and Nextel Communications, Inc. (“Nextel,” with WCA, Sprint and Nextel hereinafter referred to collectively as the “BRS Parties”) for mitigating the harmful interference that Broadband Radio Service (“BRS”) channel 1 licensees will receive from unlicensed Industrial, Scientific and Medical (“ISM”) devices due to the forced relocation of BRS channel 1 from the 2150-2156 MHz band to the 2496-2502 MHz band, in order to create auctionable spectrum for Advanced Wireless Services at 2110-2155 MHz. The Commission should reject IMPI’s filing out of hand — IMPI’s rhetoric is merely another example of the ISM community’s stubborn refusal to address the BRS/ISM interference problem in good faith.

In their respective petitions for reconsideration and related pleadings in response to Commission’s *Report and Order* in IB Docket No. 02-364 and *Fourth Report and Order* in ET

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<sup>1</sup> See Letter from Neal S. Cooper, President, International Microwave Power Institute, IB Docket No. 02-364 and ET Docket No. 00-258 (filed July 1, 2005) [“IMPI Opposition”].

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Docket No. 00-258 (collectively, the “*Reallocation Order*”),<sup>2</sup> the BRS Parties requested, *inter alia*, that the Commission take reasonable measures to limit the amount of interference relocated BRS channel 1 licensees will suffer from co-channel ISM devices at 2496-2500 MHz (*i.e.*, the portion of the 2496-2502 MHz band which relocated BRS channel 1 licensees will be required to share with ISM).<sup>3</sup> There is no dispute that the source of the problem is Section 18.305(a) of the Commission’s Rules, which does not impose any limit on the power an unlicensed ISM device may emit in the 2496-2500 MHz band and thus obviously threatens licensed BRS operations in that band with a substantial risk of co-channel interference. Accordingly, the BRS Parties suggested that the Commission require all Part 18 ISM devices marketed in the United States after December 31, 2006 to restrict their emissions in the 2496-2500 MHz band to 500 microvolts/meter (uV/m), measured at 3 meters.<sup>4</sup> To fairly accommodate the legitimate needs of unlicensed ISM interests, WCA and Sprint also proposed that the Commission grandfather any ISM devices marketed on or before December 31, 2006.<sup>5</sup> Nextel recommended similar relief, stating that “new ISM emissions limitations into the 2495-2500 MHz band should allow sufficient time for ISM developers to transition product lines; two years should provide ample time for manufacturers to transition product lines, if necessary.”<sup>6</sup>

It comes as no surprise that IMPI’s filing is as deficient as the prior oppositions filed in this matter by various vendors of microwave ovens and Fusion UV Systems, Inc., a manufacturer of microwave-powered UV lamps (collectively, the “ISM Vendors”).<sup>7</sup> Like the ISM Vendors,

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<sup>2</sup> *Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands and Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Service to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems*, Report and Order and Fourth Report and Order, 19 FCC Rcd 13356 (2004).

<sup>3</sup> See Petition for Partial Reconsideration of the Wireless Communications Ass’n Int’l. IB Docket No. 02-364 *et al.*, at 23-26 (filed Sept. 8, 2004) [“WCA Petition”]; Sprint Petition for Partial Reconsideration, IB Docket No. 02-364 *et al.*, at 6-7 (filed Sept. 8, 2004) [“Sprint Petition”]; Petition for Reconsideration of Nextel Communications, Inc., IB Docket No. 02-364 *et al.*, at 9-11 (filed Sept. 8, 2004) [“Nextel Petition”]; Joint Reply of Wireless Communications Ass’n Int’l *et al.*, IB Docket No. 02-364 *et al.* (filed Mar. 11, 2005); Surreply of Wireless Communications Ass’n Int’l, IB Docket No. 02-364 (filed Dec. 17, 2004).

<sup>4</sup> See WCA Petition at 25, Sprint Petition at 7. This is the emission limit applicable to unlicensed intentional radiators under Section 15.209(a) of the Commission’s Rules, and is the maximum emission level to which BRS licensees have been subjected in the 2150-2156 MHz band. See also Nextel Petition at 11 n.31 (“Limitations on ISM emissions could, for example, be made consistent with the Commission’s Part 15 emission limitations that BRS and EBS licensees must accept.”).

<sup>5</sup> See WCA Petition at 25, Sprint Petition at 7.

<sup>6</sup> Nextel Petition at 11 n. 31.

<sup>7</sup> See Fusion UV Systems, Inc. Consolidated Opposition to Petitions for Reconsideration, IB Docket No. 02-364 (filed Jan. 21, 2005); Reply of Whirlpool Corporation, IB Docket No. 02-364 (filed Nov. 8, 2004); Comments of LG Electronics Inc., IB Docket No. 02-364 (filed Nov. 5, 2004); Replies of Matsushita Electric Corporation of America,

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IMPI does not dispute that Section 18.305(a) will expose BRS channel 1 licensees to a heightened risk of interference once they are relocated to the 2496-2502 MHz band, nor does it dispute that such interference will occur if BRS channel 1 licensees are forced to co-exist with ISM devices under the current rule. Like the ISM Vendors, IMPI provides no support whatsoever for its claim that the limited relief requested by the BRS Parties would harm the ISM industry. Indeed, IMPI does not allege, much less establish, that compliance with the BRS Parties' proposed emission limit on a prospective basis would be problematic for vendors or users of ISM devices. Instead, IMPI offers only generic support for the oppositions filed by the ISM vendors, supplemented with a laundry list of ISM uses which, apparently, IMPI believes will be at risk under the BRS Parties' proposal. Yet nowhere has IMPI or its predecessors shown that such risk actually exists – as before, they remain content to let the matter lie and force the Commission and relocated BRS channel 1 licensees to deal with the consequences.<sup>8</sup>

The BRS Parties must emphasize again that this is not a problem of the BRS industry's making — it was imposed on the BRS industry when the Commission decided to relocate BRS channel 1 and 2 licensees out of the 2150-2162 MHz band to create auctionable AWS spectrum at 2110-2155 MHz. It must also be reemphasized that *neither IMPI nor the ISM Vendors have disputed that Section 18.305(a) exposes relocated BRS channel 1 licensees to a clear and present threat of harmful interference at 2496-2502 MHz*. Yet while IMPI and the ISM Vendors have had more than ample time to address the issue, the BRS Parties' proposal remains the only one before the Commission that addresses the BRS/ISM sharing issue in good faith: if adopted, the proposal will at least mitigate the risk of ISM interference to BRS operations at 2496-2502 MHz without forcing replacement of ISM devices already or soon to be placed in the field. While this clearly is not the optimal solution for the BRS industry (since it will leave BRS channel 1 licensees subject to interference until the installed base of unlicensed ISM devices is replaced), it will permit the Commission to gradually reduce the ISM interference risk over time, as older unlicensed ISM devices are replaced in the normal course by newer ones. Eventually (although not as soon as BRS channel 1 licensees would prefer), interference to BRS channel 1 from unlicensed ISM devices will be controlled.

The BRS Parties remain open to any alternative solution that addresses the BRS/ISM interference problem in an equitable manner. No such solution is achievable, however, so long as the ISM community refuses to come to the table or even acknowledge that the problem exists. Of course, the ISM community's self-interest is not the Commission's first priority here – given that the interference threat here is undisputed, the Commission does not have the option of ignoring the problem in the hope that it will somehow resolve itself without the cooperation of

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IB Docket No. 02-364 (filed Nov. 8, 2004); Replies of the Association of Home Appliance Manufacturers, IB Docket No. 02-364 (filed Nov. 8, 2004); Replies of GE Company, IB Docket No. 02-364 (filed Nov. 9, 2004).

<sup>8</sup> See IMPI Opposition at 1-2.

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ISM interests. The Commission thus can and should adopt the BRS Parties' proposal to ensure that relocated BRS channel 1 licensees are assured at least *some* protection from ISM interference at 2496-2502 MHz, the ISM community's obstinance notwithstanding.

Respectfully submitted,

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